

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
7 April 2005 (07.04.2005)

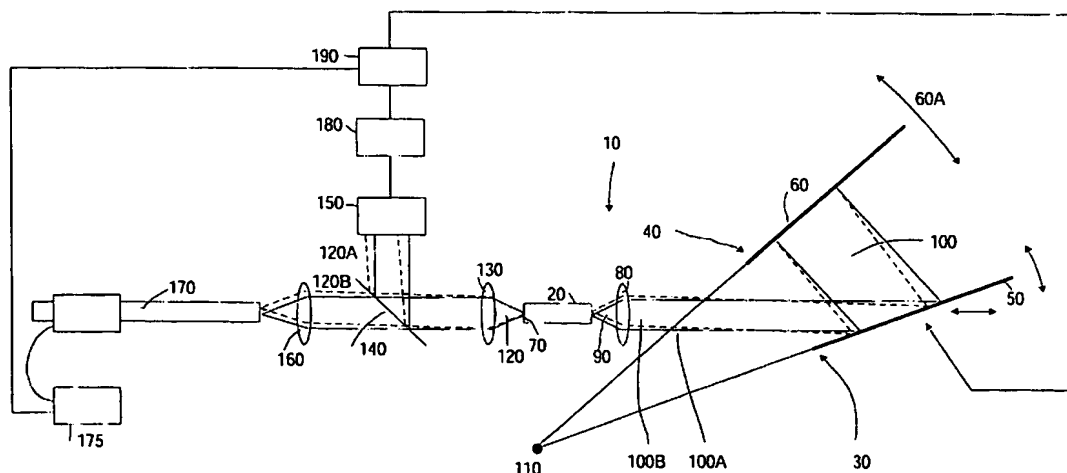
PCT

(10) International Publication Number
WO 2005/031929 A1

- (51) International Patent Classification⁷: **H01S 3/139**, 5/14, 5/0687
- (74) Agent: **BARTH, Daniel**; Herrenberger Str. 130, 71034 Böblingen (DE).
- (21) International Application Number:
PCT/EP2003/050665
- (22) International Filing Date:
29 September 2003 (29.09.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (71) Applicant (for all designated States except US): **AGILENT TECHNOLOGIES, INC.** [US/US]; 395 Page Mill Road, Palo Alto 94306 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **NEBENDAHL, Bernd** [DE/DE]; Ziehrenweg 1, 71254 Ditzingen (DE). **KALLMANN, Ulrich** [DE/DE]; Haaggasse 17, 72070 Tübingen (DE).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report

[Continued on next page]

(54) Title: **ANGULAR LASER CONTROL**



(57) Abstract: Disclosed is a control unit for controlling a laser unit comprising a laser gain medium and an external cavity having a reflecting dispersion device. The laser gain medium is adapted for providing a first beam towards the reflecting dispersion device, the reflecting dispersion device is adapted for receiving the first beam and reflecting a beam, having a reflection angle dependent on the wavelength, towards the laser gain medium, and the laser gain medium is adapted for providing a second beam in another direction than the first beam. The control unit comprises an angle unit adapted for providing an angular variation signal indicative of an angular variation of the second beam, and an analysis unit adapted for receiving the angular variation signal and controlling the reflection angle of the reflecting dispersion device dependent on the angular variation signal.



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.